U.S. National Work Group for the

Development of Commercial Hydrogen Measurement Standards

January 13, 2010

Joint Device Standards Subcommittee (DSS) and Fuel Specifications Subcommittee (FSS)

Tele/Web Conference Meeting

AGENDA

Time: Wednesday, January 13, 2010/3:00 p.m. – 4:30 p.m. ET-USA & Canada (GMT - 05:00)

Meeting Name: H2 U.S. National Work Group January 13, 2010 Tele/Web Conference Meeting

NOTE: Please log into the web site first. On the attendee list click on the telephone icon and have the system call your telephone number. If that process does not work dial the number and enter the pass code listed below.

To join the meeting online: http://nist.na6.acrobat.com/usnwg-h2/

Call-In Telephone Number: 1-877-685-5350

Call-In Password: 908127

Audio Conference Only: *6 to MUTE or UNMUTE

This meeting is sponsored by the U.S. Department of Energy and U.S. Department of Commerce's National Institute of Standards and Technology.

Purpose: The U.S. National Work Group (USNWG) is meeting to continue its work to promote the establishment of a comprehensive set of (1) design, accuracy, installation, use, and method of sale requirements, (2) test procedures, and (3) quality standards for hydrogen fuel and equipment used in hydrogen measurements for vehicle and other refueling applications.

ATTACHMENTS:

| Appendix A | Draft Summary of the April 2009 USNWG Meeting |
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| Appendix B | Draft Summary of the August 2009 USNWG Meeting |
| Appendix C | Draft Summary of the December 2009 USNWG Meeting |
| Appendix D | Preliminary USNWG's Responses to Input on the Draft Hydrogen Codes from the Fall 2009 |
| | Regional Weights and Measures Associations (rev.1) |
| Appendix E | Draft 5.0 of the NIST Handbook 44 Hydrogen Gas-Measuring Devices Code |
| Appendix F | Draft 3.0 of the NIST Handbook 130 Uniform Laws and Regulations and Hydrogen Fuel |
| | Quality Codes |

AGENDA TOPICS

3:00 P.M. (ET)

(1) Welcome Current/New Members and Roll Call

New members of the USNWG and visitors will be welcomed, the meeting is called to order, time for a roll call, and the meeting's purpose is reviewed. The collaborative work by the meeting's sponsors will be recognized. New participants will be invited to provide their name, affiliation, and state their specific area of interest in the work to develop hydrogen measurement standards.

(2) Administrative Business

The USNWG will discuss and decide on procedures for managing and documenting its technical work. The following item(s) will be addressed:

(a) Approve the Summary of the April 2009 USNWG Meeting (see Appendix A)

A draft summary of the April 28-30, 2009 USNWG in-person meeting (CaFCP, West Sacramento, CA) was emailed on December 12, 2009 to the group for its review. The USNWG agreed to review, compile any comments, and be ready to vote on approval of the summary by the upcoming January 13, 2010 tele/web conference meeting.

(b) Approve the Summary of the August 2009 USNWG Meeting (see Appendix B)

A draft summary of the August 11-13, 2009 USNWG in-person meeting (NIST, Gaithersburg, MD) was emailed on December 12, 2009 to the group for its review. The USNWG agreed to review, compile any comments, and be ready to vote on approval of the summary by the upcoming January 13, 2010 tele/web conference meeting.

(c) Approve the Summary of the December 2009 USNWG Meeting (see Appendix C)

A draft summary of the December 15, 2009 USNWG tele/web conference meeting was emailed on January 4, 2010 to the group for its review. During the January 13, 2010 meeting, the USNWG will discuss any modifications to the summary and vote to approve the summary.

(d) Agenda Updates for January 2010

(3) Opportunity for Reports on Related Activities

The USNWG is working to harmonize, wherever possible, with related standards to encourage uniformity and to avoid contradictory requirements and trade barriers for U.S. industry. The USNWG Subcommittees will receive updates on work by organizations such as ASTM, CaFCP, DMS, NHA, OIML, SAE and other related activities as their work continues to progress.

(4) Development of Device Standards and Test Procedures for Commercial Hydrogen Measurement

(a) Address Comments on Draft Hydrogen Codes/Input to the January 2010 National Conference on Weights and Measures (NCWM)

In preparation for input to the January 24-27, 2010 NCWM, the USNWG will be asked to continue discussions to address comments received on the draft hydrogen codes from the U. S. regional weights and measures associations that met fall 2009 and USNWG members.

There were 24 comments* that may require input from the USNWG. The reasons for these comments varied and are as follows:

- Clarify some text/terms borrowed from existing codes
- Address safety

- Provide an equipment test procedure
- Consider any limits imposed on other applications
- Select suitable corresponding terms/wording from alternative code sections
- Determine if some code sections apply to a laboratory environment
- Regroup paragraph(s) with similar technical requirement(s)

The USNWG is working to reach a consensus in its response to comments received in fall 2009 from the weights and measures community on Draft 5.0 of the NIST Handbook 44 (see Appendix E) and Draft 3.0 of the NIST Handbook 130 (see Appendix F) hydrogen codes. At the conclusion of the December 15, 2009 meeting, the 24 comments received were placed into groups of four possible approaches (see Appendix D). The USNWG agreed to review and comment on all four groups to determine if the comments are grouped under the most appropriate approach, and if not, then provide alternative code language or strategies.

USNWG comments on these approaches were to be emailed to Technical Advisor Juana Williams at juana.williams@nist.gov by **January 6, 2010**. The USNWG is asked to use the table at the end of Appendix C to indicate a preference for an approach, provide alternative code language, etc. and include any additional comments.

Please note that on January 4, 2010, an updated list containing each comment along with either a suggested response or possible action item (see Appendix D) was emailed to the USNWG for its review. The USNWG will be asked to agree on the appropriate response, where necessary, to each comment.

(5) Next Steps/Tasks

The USNWG will discuss upcoming events and the next steps in the weights and measures standards development process that may affect its work to fully develop hydrogen measurement standards and test procedures. Projects, strategies, and target dates will also be identified to ensure that the USNWG meets its goals.

(6) Next Meeting

The USNWG has no in-person or tele/web conference meetings scheduled for 2010.

4:30 P.M. (ET) Meeting Adjourns